# Powering & DSO Tests

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### Overview of major LS1 Access System modifications

Task Name	Where	Description	ECR
Sectorisation Changes	TI2	Displacement of Door PPG2145 separating the LHC and the SPS in TI2 tunnel	1253832
	LHC1	Displacement of PADs from UJ14/16 to UL14/16	1218906
	LHC4	Displacement of PAD UX451	1346280
	USC55	Creation End-of-Zone Door for Material Transfer Between USC55 and the Bypass	1236542
Interlocking PM32	PM/TZ32	Creation of an Interlocked Service Zone PM32	1254796
Access Point Maintenance Doors	LHC	LACS/LASS Top of the Pit Maintenance Doors	1317397
New Radiation Veto	LHC2,6,8	New Radiation Vetoes for the Injection Lines and Beam Dump Transfer Galleries	1254007
Monitoring of Helium Conf. Doors in LASS	TI2/TI8	Interlocking of Injection Tunnel Upstream Areas with LHC Powering	1257949
	LHC	Monitoring of pressure resistant doors in LASS	1288596
Access – Powering Interlock	CCR, LHC	Change of the Interlocking of Powering and Access systems	1246780
Monitoring of Doors Important for Control of Activated Air	US32/US76	Add the following ventilation doors to LASS: YCPV01=US32, YCPV01=US76	
	UP53	Add the following ventilation door to LASS: YCPV01=UP53	1288596
	LHC2,4,6,8	Monitor the ventilation doors between Service and Tunnel areas in even points	
Point 7 Collimation	LHC7	LHC Point-7 Collimator Region Enclosure and Ventilation Bypass	1303048
Upgrade of LASS IT Infrastructure	CCC/CCR	Exchange of LASS servers and client computers, upgrade of Siemens PCS7	
LACS	CCC	New tool for video, TIM views replace Evolynx LASS ones, upgrade from XP	

#### T. Ladzinski



### Test planning - powering

- Many access system modifications during LS1 implementation well on track.
- Powering-Interlock tests in June-July:
  - validate the functioning of the access-powering interlock
  - validate the patrol and EIS-access position signals
- Powering-Interlock test dates (Fridays).

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LHC8-LHC1-TI8 (ECX4,TAG42) powering of sector 8-1
LHC6-LHC7-LHC8 powering of sectors 6-7 & 7-8
LHC1/1.8-LHC2-TI2 (SPS also) powering of sector 1-2
LHC2-LHC3-LHC4 powering of sectors 2-3 & 3-4
LHC4-LHC5-LHC6 powering of sectors 4-5 & 5-6
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Access only for GS/ASE to Tunnel and Service Zones
Will be patrolled the evening before – **restricted mode!** 



## **DSO** test planning

- In march two DSO test dates were requested.
  - □ Weekend 4/5 October
  - □ Weekend 11/12 October BACKUP
- With the large number of modifications introduced during LS1, it will be very difficult to compress all tests in a single weekend.
- Both weekends will be required for the tests (machine and experiments closed).
  - □ Weekend 4/5 October Beam Mode Tests by GS/ASE (exhaustive test for new equipment/functions)
  - □ Weekend 11/12 October the DSO Test (sampling)